

VoIP Router

ADVANCED VOIP GATEWAY



VOIP-FXO/FXS



VOIP-4FXO/4FXS



VOIP-8FXO/8FXS



VOIP-16-32FXO/FXS

Description

The CXR Series analog VoIP gateways are feature-rich and cost-effective products designated for telecom operators to provide telephony services with security-enhanced capabilities in the modern complex networks.

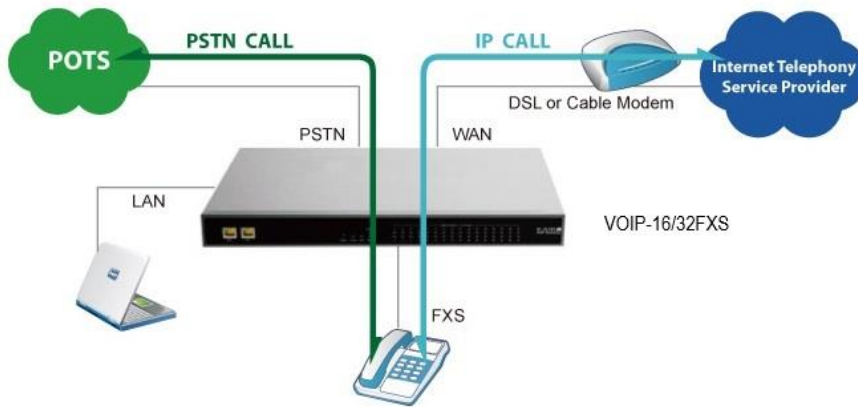
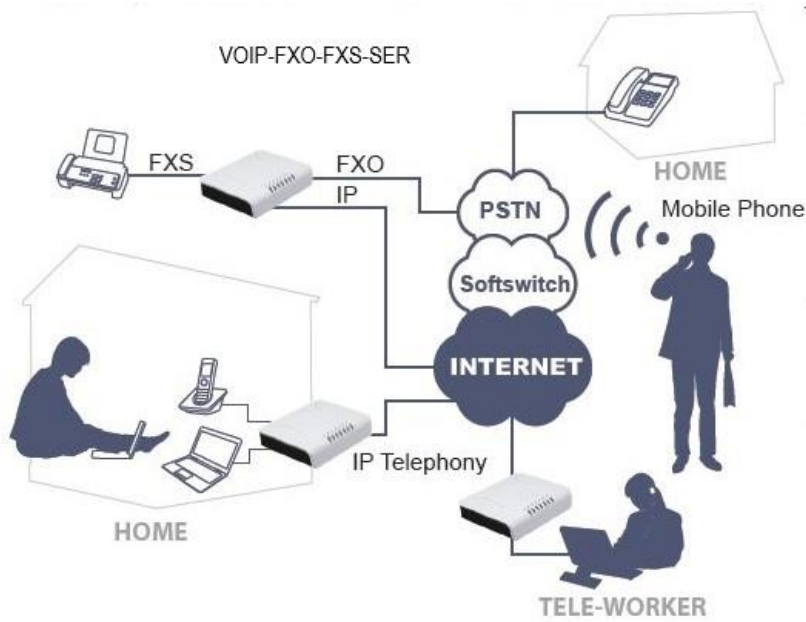
The CXR Series VoIP Gateway empowers service providers delivering carrier-class IP Centrex service over a Total-IP NGN / 3GPP IMS infrastructure in a more secured way.

The CXR VoIP Gateway provides a connection platform between traditional POTS lines and the Internet. Over various broadband technologies including xDSL, HFC, wireless and fiber, the gateway carries toll quality voice, fax and data traffic simultaneously in a cost-effective way.

The VoIP gateway provides a connection platform between traditional POTS lines and the Internet. Over various broadband technologies including xDSL, HFC, wireless and fiber, the VoIP Series carries toll quality voice, fax and data traffic simultaneously in a cost effective way. In addition, the VoIP Series supports intelligent features like long loop, line testing, polarity reversal, caller ID, call transfer, call waiting and 3-way calling. The ideal applications include MTU/MDU, virtual PBX, IP Centrex, PBX extension and hosted telephony services.



Application



General Features and Specifications

Voice Features

- G.722 64kbps, G.711 a/ μ -law, G.729A, G.726, G.723.1

GSM 6.10 Full Rate, iLBC 13.3 kbps

- DTMF Detection and Generation
- Silence Suppression & Detection
- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Echo Cancellation (G.168)
- Dynamic Jitter Buffer
- Call progress tone detection (FXO) and generation (FXS)
- Programmable Gain Control
- Inbuilt Local Mixer
- ITU-T V.152 Voice-band Data over IP Networks

SIP Method Support

ACK, BYE, CANCEL, INFO, INVITE, MESSAGE, NOTIFY, OPTIONS, PING, PRACK, PUBLISH, REFER, REGISTER, SUBSCRIBE, UPDATE

SIP Call Features

- Peer to Peer Call
- Call Hold / Retrieve
- Call Waiting
- Call Pick Up
- Call Park / Retrieve (SIP Server Required)
- Call Forward - unconditional, busy, no answer
- Call Transfer - attended, unattended
- Do Not Disturb
- Speed Dialing
- Repeat Dialing
- Three-way Calling
- MWI (RFC-3842)
- Hot Line and Warm Line

SIP Call Management

- Support Outbound Proxy
- Support SIP Compact Form
- SIP Registration Failover
- Group Hunting
- P-Asserted-Identity per RFC3325
- Privacy Mechanism per RFC3323
- Session Timers (Update / Re-invite)
- DNS SRV Support
- Call Types: Voice / Modem / FAX
- User Programmable Dial Plan Support
- Automatic Calling Number Manipulation
- CDR by RADIUS client



- Manual Peer Table (for P2P calls)
- E.164 Numbering, ENUM support

Telephony Specifications

- Configurable Payphone charging pulse interval by SIP OPTION
- In-Band DTMF, Out-of-Band DTMF Relay (RFC2833 or SIP INFO)
- DTMF / PULSE Dial
- Caller ID Generation / Detection: DTMF
 - FSK-Bellcore Type 1 & 2
 - FSK-ETSI Type 1 & 2
 - FSK-NTT
 - FSK: Calling Name, Number, Date and Time, VMWI
- FXS metering pulse options:
 - Polarity Reversal
 - 12kHz calling tone
 - 16kHz calling tone
- Configurable Payphone charging signal interval by SIP OPTION
- Polarity Reversal Detection (FXO) and Generation (FXS)
- T.30 FAX passthrough, T.38 Real Time FAX Relay
- Auto PSTN bypass at network or power failure(SP350SO)
- ROH Tone (Receiver Off-Hook Tone @ 480 Hz)
- Loop Current Suppression
- Call Feature enable/disable via phoneset

SIP Account Management

- By port registration
- By device registration (share account)
- Mixed mode (Hunt number for inbound, by port number for outbound)
- Invite with Challenge
- IP Address or Domain Name registration
- Support RFC3986 SIP URI format

IP Network Specifications

- WAN: Static IP, PPPoE, DHCP, PPTP and L2TP
- NAT Functions:
 - Support up to 250 Clients
 - Port Forwarding (Virtual Servers)
 - DMZ
- Support IPv4, IPv6(optional)
- QoS Support:
 - WAN: DiffServ, IP Precedence, Priority Queue
 - Rate Control, 802.1Q (VLAN Tagging),
 - 802.1p (Priority Tag)
 - LAN: Rate Limit
- DDNS Support
- Network Protocol Support:
IP, TCP, UDP, TFTP, FTP, RTP, RTCP, ARP, ICMP, NTP, DHCP, STUN Client, HTTP, HTTPS, DNS, DNS SRV, Telnet, UPnP, IGMP, IGMP snooping, IGMP proxy, RTSP ALG, SIP ALG

Device Management

- Web Based Configuration
- Telnet command line interface (CLI)
- IVR Configuration
- FTP / TFTP / HTTP Software Upgrade
- Configuration Backup and Restore
- Factory Defaults
- TR-069, TR-098, TR-104
- TR-111 part I & II (DHCP option 125)
- DHCP option 43, 60 Auto Provisioning
- SNMP V3/ V2c/ V1

Standard Compliance

SIP, Voice and FAX Related Standard

- RFC1889 ■ RFC2543 ■ RFC2833 ■ RFC2880 ■ RFC2976 ■ RFC3261
- RFC3262 ■ RFC3263 ■ RFC3264 ■ RFC5359 ■ RFC3265 ■ RFC3311
- RFC3323 ■ RFC3325 ■ RFC3362 ■ RFC3515 ■ RFC3550 ■ RFC3665
- RFC3824 ■ RFC3841 ■ RFC3842 ■ RFC3891 ■ RFC3892 ■ RFC3960
- RFC3986 ■ RFC4028

Network Related Standard

- RFC318 ■ RFC791 ■ RFC792 ■ RFC793 ■ RFC768 ■ RFC826 ■ RFC959
- RFC1034 ■ RFC1035 ■ RFC1058 ■ RFC1157 ■ RFC1305 ■ RFC1321
- RFC1349 ■ RFC1350 ■ RFC1661 ■ RFC1738 ■ RFC2854 ■ RFC2131
- RFC2136 ■ RFC2327 ■ RFC2474 ■ RFC2516 ■ RFC2616 ■ RFC2617
- RFC2637 ■ RFC2766 ■ RFC2782 ■ RFC2818 ■ RFC2916 ■ RFC3022
- RFC3489

General Information

Power: AC 100~240V 50/60Hz input, DC 12V/2A output

Operating temperature: 0°C ~ 45°C

Storage temperature: -25°C ~ 75°C

Operating Humidity: Up to 90% RH, non-condensing

VoIP 2 ports model

Physical Interface

- WAN : 1 x 100 baseTx, auto cross-over, auto speed negotiation, RJ-45
- LAN : 1 x 100 baseTx, auto cross-over, auto speed negotiation, RJ-45
- Telephone : RJ11 FXS or FXO port
- Factory default

VoIP 4/8 ports model

Physical Interface

- WAN : 1 x 10/100/1000M Ethernet, auto cross-over, auto speed negotiation, RJ-45
- LAN : 4 x 10/100/1000M Ethernet, auto cross-over, auto speed negotiation, RJ-45
- RJ-11 telephony connectors
- AC power jack, power switch
- Reset button

VoIP 16/32 ports model

Physical Interface

- WAN: 1 x 10/100 base-T Interface, auto cross-over, auto speed negotiation, RJ-45
- LAN: 4 x 10/100 base-T Interface, auto cross-over, auto speed negotiation, RJ-45
- 1 or 2 x RJ-21 female connectors for FXS/ PSTN line wiring
- AC/ DC power jack, power switch
- Reset button

Ordering information

Models

Ordering Code	Description
VOIP-FXO-FXS-SER	VoIP Gateway to extend Voice over Ethernet link, 1 FXS and 1 FXO, 1 Ethernet WAN and 1 LAN 10/100BaseT, integrated limited SIP server. Power supply 12Vdc deliver with AC/DC converter.
VOIP-2FXO2FXS-SER-B	VoIP Gateway to extend Voice over Ethernet link, 2 FXS and 2 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. Power supply 12Vdc deliver with AC/DC converter.
VOIP-4FXO4FXS-SER-B	VoIP Gateway to extend Voice over Ethernet link, 4 FXS and 4 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. Power supply 12Vdc deliver with AC/DC converter.
VOIP-4FXO-SER-B	VoIP gateway to extend voice over Ethernet link, 4 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. Power supply 12Vdc deliver with AC/DC converter.
VOIP-8FXO-SER	VoIP gateway to extend voice over Ethernet link, 8 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. Power supply 12Vdc deliver with AC/DC converter.
VOIP-16FXO-SER	VoIP gateway to extend voice over Ethernet link, 16 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. AC power supply (option DC48v), delivered with 1 Telco50RJ21 cable à 16 RJ11.
VOIP-32FXO-SER	VoIP gateway to extend voice over Ethernet link, 32 FXO, 1 Ethernet WAN and 4 LAN 10/100BaseT, integrated limited SIP server. AC power supply (option DC48v), delivered with 2 Telco50RJ21 cable à 16 RJ11.
VOIP-2FXS	VoIP gateway to extend voice over Ethernet link, 2 FXS, 1 Ethernet WAN and 4 LAN 10/100BaseT. Power supply 12Vdc deliver with AC/DC converter.
VOIP-4FXS-B	VoIP gateway to extend voice over Ethernet link, 4 FXS, 1 Ethernet WAN and 4 LAN 10/100BaseT. Power supply 12Vdc deliver with AC/DC converter.
VOIP-8FXS-B	VoIP gateway to extend voice over Ethernet link, 8 FXS, 1 Ethernet WAN and 1 LAN 10/100BaseT. Power supply 12Vdc deliver with AC/DC converter.
VOIP-16FXS	VoIP gateway to extend voice over Ethernet link, 16 FXS, 1 Ethernet WAN and 1 LAN 10/100BaseT. AC power supply (option DC48v), delivered with 1 Telco50RJ21 cable à 16 RJ11.
VOIP-32FXS	VoIP gateway to extend voice over Ethernet link, 32 FXS, 1 Ethernet WAN and 1 LAN 10/100BaseT. AC power supply (option DC48v), delivered with 2 Telco50RJ21 cable à 16 RJ11.
VOIP-16FXO	VoIP gateway to extend voice over Ethernet link, 16 FXO, 1 Ethernet WAN and 1 LAN 10/100BaseT. AC power supply (option DC48v), delivered with 1 Telco50RJ21 cable à 16 RJ11.
VOIP-32FXO	VoIP gateway to extend voice over Ethernet link, 32 FXO, 1 Ethernet WAN and 1 LAN 10/100BaseT. AC power supply (option DC48v), delivered with 2 Telco50RJ21 cable à 16 RJ11.